

Attorney Docket No. 9000-0057.01

PATENT

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of POTTER et al.

Serial No.: CON of 09/878,766

Examiner: Unassigned

Confirmation No.:

Art Unit: Unassigned

Filed: On even date

For: IMMUNIZATION OF DAIRY CATTLE WITH CHIMERIC GapC PROTEIN  
AGAINST STREPTOCOCCUS INFECTION

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Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §1.97(b)**

In accordance with the duty of disclosure set forth in 37 C.F.R. §1.56,  
Applicant(s) hereby submits the following information in conformance with 37 C.F.R.  
§§1.97 and 1.98.

- ☐ Pursuant to 37 C.F.R. §1.98, a copy of each document cited in the attached Form PTO-1449 is enclosed.
- ☒ No copies of the publications listed on the attached Form PTO-1449 are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in prior Application Serial No. 09/878,766 to which the above-identified application claims priority under 35 U.S.C. §120.
- ☐ Publication(s) \_\_\_\_\_ listed on the attached Form PTO-1449 were cited in a foreign search or examination report corresponding to \_\_\_\_\_ application serial no. \_\_\_\_\_ and mailed on \_\_\_\_\_.
- ☐ Enclosed is a copy of a non-English publication(s) \_\_\_\_\_. Pursuant to §609 of the M.P.E.P., Applicant submits the attached foreign search or examination report, which cites such non-English language publication(s).

- ☐ Enclosed is a copy of a non-English publication(s) \_\_\_\_\_. English language publication \_\_\_\_\_ (copy enclosed) claims priority from this non-English publication.
- ☐ Enclosed is an explanation of non-English publication(s) \_\_\_\_\_ for which an English translation is not available.
- ☐ Enclosed is an English translation of non-English publication(s) \_\_\_\_\_ cited in the attached Form PTO-1449.
- ☐ Enclosed is a copy of pending patent Application Serial No. \_\_\_\_\_.

This Information Disclosure Statement is filed with the herein continuation application.

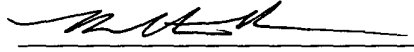
It is respectfully requested that the Examiner consider the above-noted information and return an initialed copy of the attached Form PTO-1449 to the undersigned.

Dated: 8/27/03

Respectfully submitted,

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Roberta L. Robins  
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FORM PTO-1449 (Modified)  
 LIST OF PATENTS AND PUBLICATIONS  
 FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT  
 (Use several sheets if necessary)  
 Sheet 1 of 4

In the Application of POTTER et al.

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Title: IMMUNIZATION OF DAIRY CATTLE WITH CHIMERIC GapC PROTEIN AGAINST  
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U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
	A1	4,954,618	09-04-1990	Fahnestock			
	A2	4,977,082	12-11-1990	Boyle et al.			
	A3	5,108,894	04-28-1992	Bjorck et al.			
	A4	5,198,215	03-1993	de Cueninck et al.	424	243.1	
	A5	5,237,050	08-17-1993	Boyle et al.			
	A6	5,328,996	07-12-1994	Boyle et al.			
	A7	5,721,339	02-24-1998	Boyle et al.			
	A8	5,863,543	01-26-1999	Jiang et al.			
	A9	6,063,386	05-2000	Dale et al.	424	184.1	
	A10	6,391,316	05-2002	Potter et al.	73	241	
	A11	2001/0014335	04-16-2001	Saitoh et al.	424	199.1	

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Date Considered:

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Translation YES NO	
	B1	EP 0 887 410	30 December 1998	EPO				
	B2	WO 00/39299	6 July 2000	PCT				
	B3	WO 93/14198	July 1993	PCT				
	B4	WO 96/40928	19 December 1996	PCT				
	B5	WO 96/41879	December 27, 1996	PCT				
	B6	WO 98/18930	May 7, 1998	PCT				
	B7	WO 99/42588	August 26, 1999	PCT				

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
	C1	Baird et al., "Epitopes of Group A Streptococcal M Protein Shared With Antigens of Articular Cartilage and Synovium," <i>The Journal of Immunology</i> <u>146</u> (9):3132-3137 (1991)

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Exam. Init.	Ref. Desig.	Description
	C2	Bisno, Alan. L., "Group A Streptococcal Infections and Acute Rheumatic Fever," <i>New Eng J. Med.</i> <u>325</u> :783-793 (1991)
	C3	Bowie et al., "Deciphering the message in protein sequences: tolerances to amino acid substitutions," <i>Science</i> <u>247</u> :1306-1310, 1990
	C4	Bronze et al., "Epitopes of Streptococcal M Proteins that Evoke Antibodies That Cross-React with Human Brain," <i>The Journal of Immunology</i> <u>151</u> (5):2820-2828 (1993)
	C5	Cunningham et al., "Study of Heart-Reactive Antibody in Antisera and Hybridoma Culture Fluids Against Group A Streptococci," <i>Infection and Immunity</i> <u>42</u> (2):531-538 (1983)
	C6	Dale, J. L., "Multivalent Group A Streptococcal Vaccine Designed to Optimize the Immunogenicity of Six Tandem M Protein Fragments," <i>Vaccine</i> <u>17</u> (2):193-200 (1999)
	C7	Dale, J. L. and Beachy, G. H., "Multiple, Heart-Cross Reactive Epitopes of Streptococcal M Proteins," <i>J. Exp. Med.</i> <u>161</u> :113-122 (1995)
	C8	Dale, J. L. and Beachy, G. H., "Protective Antigenic Determinant of Streptococcal M Protein Shared With Sarcolemmal Membrane Protein of Human Heart," <i>J. Exp. Med.</i> <u>156</u> :1165-1176 (1985)
	C9	Finch et al., "Further Studies on the Efficacy of a Live Vaccine Against Mastitis Caused by Streptococcus <i>Uberis</i> ," <i>Vaccine</i> <u>15</u> (10):1138-1143 (1997)
	C10	Froude et al., "Cross-Reactivity Between Streptococcus and Human Tissue: A Model of Molecular Mimicry and Autoimmunity," <i>Microbiology and Immunology</i> <u>145</u> :5-26 (1989)

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Exam. Init.	Ref. Desig.	Description
	C11	Gase et al., "Cloning Sequencing and Functional Overexpression of the Streptococcus Equisimilis H46A gapC Gene Encoding a Glyceraldehyde-3-Phosphate Dehydrogenase that also Functions as a Plasmin(ogen)-Binding Protein. Purification and Biochemical Characterization of the Protein," <i>European Journal of Biochemistry</i> <u>239</u> (1):42-51 (1996)
	C12	Hafid et al., "Glyceraldehyde-3-phosphate dehydrogenase from tetrahymena pyriformis: enzyme purification and characterization of a gapC gene with primitive eukaryotic features," <i>Comparative Biochemistry and Physiology B</i> <u>119</u> :493-503, 1998
	C13	Kehoe, Michael A., "Group A Streptococcal Antigens and Vaccine Potential," <i>Vaccine</i> <u>9</u> :797-806 (1991)
	C14	Lancefield, Rebecca C., "Current Knowledge of Type-Specific M Antigens of Group A Streptococci," <i>J. of Immunology</i> <u>89</u> :307-313 (1962)
	C15	Langone, John J., "Protein A of <i>Staphylococcus aureus</i> and Related Immunoglobulin Receptors Produced by Streptococci and Pneumonococci," <i>Advances in Immunology</i> <u>32</u> :167 (1982)
	C16	Liljeqvist et al., "Surface Display of Functional Fibronectin-Binding Domains on <i>Staphylococcus carnosus</i> ," <i>FEBS Letters</i> <u>446</u> :299-304 (1999)
	C17	Stollerman, G. H., "Rheumatogenic Streptococci and Autoimmunity," <i>Clin. Immunol. Immunopathology</i> , <u>61</u> :131-142 (1991)

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